

## ABSTRACT

A multi-mode power supply device of a wireless earphone is disclosed. The earphone is communicable bi-directionally with portable communication devices wirelessly through an antenna. The earphone has a battery set. In at least one side of the earphone; an internal of the earphone has a power management circuit. The battery set supplies power to the power management circuit. The power management circuit is used to control the power on or off. The communication devices are selected from portable mobile phones and vehicle used phones. A suspender is capable of being inserted into or buckled into the groove of the earphone so that the suspender is positioned at one side of the power supply module. The suspender has a power supply module. When the suspender is combined to the earphone. The power management circuit is electrically connected to the power supply module.